

CLAIMS:

What is claimed is:

1. A method comprising:
 2. receiving a datagram through a platform management communication channel; and
 3. analyzing at least a subset of the received datagram for information necessary to identify
 4. routing information of the received content.
1. 2. A method according to claim 1, further comprising:
 2. forwarding the datagram towards a destination determined from the analyzed subset of
 3. the received datagram.
1. 3. A method according to claim 1, wherein the datagram is received from a control element
2. coupled with the platform management communication channel.
1. 4. A method according to claim 1, wherein analyzing the received content comprises:
 2. identifying a source address within the routing information; and
 3. selecting a destination address from a plurality of possible destination addresses based, at
 4. least in part, on the identified source address.
1. 5. A method according to claim 4, wherein the source address is a physical address privately
2. correlated with a virtual address of a control element sending the received datagram.
1. 6. A method according to claim 1, wherein analyzing the received datagram comprises:

2 identifying a destination address within the received datagram; and
3 determining whether the identified destination address corresponds to a physical address
4 in a host platform management architecture.

1 7. A method according to claim 6, further comprising:
2 forwarding the datagram to the destination address denoted within the received datagram
3 if it is determined to be a physical address within the host platform management architecture.

1 8. A method according to claim 6, further comprising:
2 resolving a physical address from a virtual address denoted by the destination address in
3 the received datagram if the destination address is found to not be a physical address.

1 9. A method according to claim 8, further comprising:
2 forwarding the datagram to the physical address resolved from the destination address
3 denoted within the received datagram.

1 10. A method according to claim 1, further comprising:
2 limiting which of a plurality of platform management elements can communicate with a
3 platform management element to establish a virtual private communication channel between
4 such elements.

1 11. A method according to claim 1, wherein the routing information comprises address
2 information associated with the destination of the received datagram.

¹ 12. A method according to claim 11, wherein the routing information comprises address
² domain information as well as a unique address identifier to uniquely identify a target of the
³ received datagram.

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¹ 13. A storage medium comprising content which, when executed by an accessing machine,
² cause the machine to implement a method according to claim 1.

i 14. A switching element comprising:

² a memory element within which is stored content; and

³ a processing element, coupled with the memory element, to execute at least a subset of
⁴ the content to implement a method according to claim 1.

2 a management data structure including content; and
3 control logic, coupled with the management data structure, to compare routing
4 information in a received platform management (PM) datagram with the content in the
5 management data structure to identify one or more platform management target element(s) for
6 the received datagram

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i 16. An apparatus according to claim 15, further comprising:

² a switching engine, responsive to the control logic, to selectively couple any of a plurality
³ of PM elements through a plurality of PM communication channels.

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1 17. An apparatus according to claim 16, wherein the switching engine selectively couples the
2 plurality of PM communication channels to the control logic, to facilitate routing of datagrams
3 among and between the PM elements.

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1 18. An apparatus according to claim 17, wherein the plurality of PM communication
2 channels are established within a single platform management bus.

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1 19. An apparatus according to claim 18, wherein the multiple communication channels are
2 established through use of multiple address domains, detailed in the content of the management
3 data structure.

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1 20. An apparatus according to claim 15, the management data structure comprising:
2 a plurality of records, one or more for at least a subset of PM elements coupled with the
3 apparatus, each of the plurality of records including one or more of an address domain field, a
4 physical address field, a physical interconnect, a virtual address field and/or a routing restrictions
5 field.

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1 21. An apparatus according to claim 20, wherein the control logic identifies a target
2 element(s) by matching the routing information of the datagram to an address domain and/or a
3 physical address within the management data structure.

1 22. An apparatus according to claim 20, wherein the control logic identifies a target
2 element(s) by matching the routing information of the datagram to an address domain and/or a
3 virtual address within the management data structure.

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1 23. An apparatus according to claim 15, wherein the apparatus is an intelligent platform
2 management bus (IPMB) switch.

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1 24. An apparatus according to claim 23, wherein the IPMB switch is embodied within an
2 intelligent platform management interface (IPMI) control element.

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1 25. An apparatus according to claim 23, wherein the IPMB switch is embodied within an
2 integrated circuit (IC) in a server chassis.

1 26. An apparatus according to claim 15, wherein the plurality of communication channels are
2 established within one or more platform management interconnect(s) across multiple servers in a
3 server chassis.

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1 27. A storage medium comprising content which, when executed by an accessing machine,
2 causes the machine to implement a switching element within an platform management
3 architecture, the switching element including a management data structure including content, and
4 control logic, coupled with the management data structure, to compare routing information in a
5 received platform management datagram with the content in the management data structure to
6 identify one or more target element(s) for the received datagram.

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- ¹ 28. A storage medium according to claim 27, wherein the content to implement the switching
² element further comprise content to selectively forward the received datagram to the identified
³ one or more target element(s) within the PM architecture.

- 1 29. A storage medium according to claim 27, wherein the content to establish the
2 management data structure includes content to maintain one or more of address domain
3 information, physical address information, physical interconnection identifier information,
4 virtual address information, and/or routing restriction information for each of a plurality of IPMI
5 elements within the IPMI architecture.